

ABSTRACT

The invention provides a liquid level detector using parameter measurements of sound waves passing along the waveguide and reflected from the surface of the liquid. The detector contains a membrane acoustical-electrical transducer in the case and the acoustic waveguide with reflectors immersed in liquid. The acoustic waveguide is a tube or several tubes and is connected to the detector case by a sleeve coupling. Inside the sleeve coupling is an acoustic matching unit between the membrane of the acoustical-electrical transducer and the inlet of the waveguide with the cavity connected with the cavity of the waveguide by means of the diaphragm with the channel. The case of the acoustical-electrical transducer is connected to the detector case through a damping element providing acoustic decoupling between the acoustical-electrical transducer and the main case of the detector. The end of the acoustic waveguide may be connected to a Γ -shaped or T-shaped intermediate waveguide.